

Notice of Allowability

Application No.

09/925,234

Examiner

Li B. Zhen

Applicant(s)

KUBOTA, YOSHIYASU

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 05/29/2007 and interview on 8/10/2007.
2. ☒ The allowed claim(s) is/are 10,11,13,14,16,17 and 19-27, renumbered as claims 1-15.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 3/22/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 20070814
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

1. Claims 10 – 30 are pending in the application.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Daryl K. Neff (Registration No. 38,253) on 10 August 2007.

The application has been amended as follows:

- a. Cancel claims 12, 15, 18 and 28 – 30; and
- b. Replace claims 10, 13 and 16 with the following:

10. An electronic device adapted to be detachably mounted to main equipment for providing optional data to the main equipment and permitting optional functions to be executed, the electronic device comprising:

a data memory unit including a plurality of address spaces;

software data stored in the data memory unit, the software data including a plurality of portions stored at respective storage addresses of the address spaces, each portion containing driver data corresponding to a specific computer environment

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selected from a plurality of different specific computer operating environments, for permitting execution of a respective one of a plurality of separately selectable functions in accordance with the specific computer operating environment of a main equipment selected from a plurality of main equipments, the storage addresses corresponding to keywords identifying the plurality of functions being stored at leaders of the address spaces, each main equipment being operable in accordance with a respective one of the plurality of different specific computer operating environments;

an interface unit in form of a memory card interface for transfer of data from the electronic device to the selected main equipment and from the selected main equipment to the electronic device; and

an output unit operable, upon mounting the electronic device to the selected main equipment and selecting a first function from among said plurality of separately selectable functions, to output a first portion of said portions of the software data containing said driver data for said selected first function and corresponding to said selected specific computer operating environment from the data memory unit to the selected main equipment through said interface unit for installation of said driver data in the selected main equipment to permit said selected first function to be executed using the electronic device while the electronic device is mounted to the selected main equipment, and upon mounting the electronic device to the selected main equipment and selecting a second function from among said plurality of separately selectable functions, to output a second portion of said portions of the software data containing said driver data for said selected second function and corresponding to said selected

specific computer operating environment from the data memory unit to the selected main equipment through said interface unit for installation of said driver data in the selected main equipment to permit said selected second function to be executed using the electronic device while the electronic device is mounted to the selected main equipment.

13. An electronic apparatus, comprising:

a main apparatus selected from a plurality of main apparatuses, each main apparatus being operable in accordance with a respective one of a plurality of different specific computer operating environments; and

an electronic device detachably mounted to the selected main apparatus for exchanging optional data with the selected main apparatus, the electronic device including a data memory unit including a plurality of address spaces, and software data stored in the data memory unit, the software data including a plurality of portions stored at respective storage addresses of the address spaces, each portion containing driver data corresponding to a specific computer environment selected from the plurality of different specific computer operating environments, for permitting execution of a plurality of separately selectable functions in accordance with the specific computer operating environment of the selected main apparatus when the electronic device is mounted to the selected main apparatus, the storage addresses corresponding to keywords identifying the plurality of functions being stored at leaders of the address spaces, an interface unit in form of a memory card interface unit for transfer of data from

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the electronic device to the selected main apparatus and from the selected main apparatus to the electronic device, the selected main apparatus including an identification unit operable to identify a first portion stored in the data memory unit of the electronic device corresponding to a first selected function on the basis of the keywords, and to obtain the first portion corresponding to the first selected function and corresponding to the specific computer operating environment of the selected main apparatus from the electronic device through the interface unit upon selecting the first function from among the plurality of functions and to install the obtained first portion on the selected main apparatus, such that the selected first function can be executed using the electronic device while the electronic device is mounted to the selected main apparatus, and to obtain a second portion corresponding to a second selected function and corresponding to the specific computer operating environment of the selected main apparatus from the electronic device through the interface unit upon selecting the second function from among the plurality of functions and to install the obtained second portion on the selected main apparatus, such that the selected second function can be executed using the electronic device while the electronic device is mounted to the selected main apparatus.

16. A method of obtaining driver software data by a main apparatus from an electronic device detachably mounted thereto, the main apparatus selected from a plurality of main apparatuses, each main apparatus being operable in accordance with a respective one of a plurality of different specific computer operating environments, to enable an

optional function to be executed while the electronic device is mounted to the selected main apparatus, the method comprising:

a) storing a plurality of portions of driver software data at respective storage addresses corresponding to keywords at leaders of address spaces in the electronic device the storage addresses corresponding to the keywords identifying the plurality of portions of driver software data, each portion for enabling execution of a respective one of a plurality of separately selectable functions including first and second separately selectable functions in accordance with the respective specific computer operating environment of the selected main apparatus when the electronic device is mounted to the selected main apparatus;

b) selecting one of the first and second functions from the plurality of separately selectable functions;

c) when the first function is selected, identifying, on the basis of the keywords, a first portion of the software data corresponding to the selected first function and corresponding to the specific computer operating environment of the selected main apparatus from among the plurality of portions corresponding to the respective functions and respective specific computer operating environments, and when the second function is selected, identifying a second portion of the software data corresponding to the selected second function and corresponding to the specific computer operating environment of the selected main apparatus from among the plurality of portions corresponding to the respective functions and respective specific computer operating environments;

d) transferring the identified portion of the software data from the electronic device to the selected main apparatus through an interface unit having a form of a memory card interface; and

e) installing the identified portion of the software data on the selected main apparatus to enable execution of the selected function using the electronic device while the electronic device is mounted to the selected main apparatus.

REASONS FOR ALLOWANCE

3. The following is an examiner's statement of reasons for allowance:

The prior art of record, specifically U.S. Patent No. 7,058,563 to Chrysanthakopoulos et al. and U.S. Patent No. 6,574,588 to Shapiro et al., does not expressly teach or render obvious the invention as recited in independent claims 10, 13 and 16.

The prior art teaches an electronic device [col. 4, lines 45 – 62 of Chrysanthakopoulos] adapted to be detachably mounted [col. 5, lines 23 – 43 Chrysanthakopoulos] to main equipment [col. 4, lines 36 – 46 Chrysanthakopoulos] for providing optional data to the main equipment, the electronic device comprising: software data stored in the data memory unit [col. 4, line 61 – col. 5, line 9 of Chrysanthakopoulos], the software data including a plurality of portions each containing driver data corresponding to a specific computer environment [col. 5, lines 9 – 24 of Chrysanthakopoulos and col. 6, lines 13 – 35 of Shapiro], an interface unit in form of a memory card interface for transfer of data from the electronic device to the selected

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main equipment [col. 4, lines 36 – 46 of Chrysanthakopoulos], an output unit operable, upon mounting the electronic device to the selected main equipment [col. 5, lines 23 – 43 of Chrysanthakopoulos], to output one of said portions of the software data containing said driver data [col. 4, line 61 – col. 5, line 10 of Chrysanthakopoulos and col. 6, lines 35 – 58 of Shapiro] and corresponding to said selected specific computer operating environment [col. 4, line 61 – col. 5, line 9 of Chrysanthakopoulos] for installation of said driver data in the selected main equipment [col. 5, line 60 – col. 6, line 11 of Chrysanthakopoulos and col. 6, lines 35 – 58 of Shapiro]. However, the prior art does not teach storing a plurality of portions of driver software data at respective storage addresses corresponding to keywords at leaders of address spaces in the electronic device, the storage addresses corresponding to the keywords identifying the plurality of portions of driver software data, each portion for enabling execution of a respective one of a plurality of separately selectable functions in accordance with the respective specific computer operating environment of the selected main apparatus.

In addition, it is not believed to have been within the level of one of ordinary skill in the art at the time of the invention to modify or integrate the electronic device of the prior art to incorporate the features of storing a plurality of portions of driver software data at respective storage addresses corresponding to keywords at leaders of address spaces in the electronic device, the storage addresses corresponding to the keywords identifying the plurality of portions of driver software data, each portion for enabling execution of a respective one of a plurality of separately selectable functions in

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accordance with the respective specific computer operating environment of the selected main apparatus as recited in the context of claims 10, 13 and 16.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

CONTACT INFORMATION


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (571) 272-3768. The examiner can normally be reached on Mon - Fri, 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on 571-272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Li B. Zhen
Examiner
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LBZ

 8/14/2007